



Minotaur-C

Ground-Launched Space Launch Vehicle

LAUNCH
VEHICLE



Small-Class



Overview

The Minotaur-C launch vehicle provides a cost-effective and reliable launch capability for satellites weighing up to 3,500 pounds (1,590 kilograms). Minotaur-C is currently in production to support U.S. Government and commercial customers. The versatility and flexibility of the Minotaur-C family of vehicles provides the means to access space for a variety of payloads.

System Features

- Incorporates all solid propulsion stages and proven technologies to meet mission requirements
- Provides substantial payload performance into a variety of low inclination low-Earth orbit (LEO), polar LEO, sun-synchronous LEO, geotransfer and interplanetary orbits
- Designed for easy transportability, rapid set-up and launch from austere launch sites
- Streamlined vehicle/payload integration and testing through simplified avionics interfaces and offline payload encapsulation
- Compatible with the U.S. Air Force Western Range (WR), Eastern Range (ER), NASA's Wallops Flight Facility, Kodiak Launch Complex (KLC) and Reagan Test Site (RTS)
- Flight-proven heritage with single and multiple payloads

FACTS AT A GLANCE

Minotaur-C incorporates advanced structural and avionics technology proven on Pegasus® and other operational launch systems



The Minotaur-C launch vehicle is a ground-launched variant of Orbital's highly successful Pegasus air-launched space booster.

Minotaur-C

All major Minotaur-C configurations (SSLV, Standard and XL) have launched.

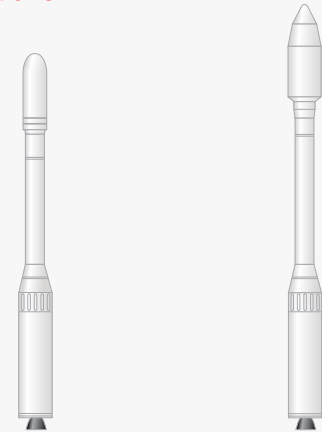
Vehicle Statistics

- Weight: 77,000 kg (170,000 lb.)
- Height: 30 to 32 m (97 to 104 ft)

Minotaur-C Configuration Numbering

	3	2	1	0
Vehicle Configuration	Fairing Size	Stage 3 Motor	Stage 4 Motor	
1 - SSLV Minotaur-C (Peace-keeper Stage 0, Std Stages 1, 2)	1 - 63" 2 - 92"	1 - Orion-38 3 - STAR-37	0 - <None> 3 - STAR-37	
2 - Standard Minotaur-C (Castor 120 Stage 0, Std Stages 1, 2)				
3 - Minotaur-C XL (Castor 120 Stage 0, XL Stages 1, 2)				

Minotaur-C Vehicle Configurations



Typical Performance	3110 Minotaur-C XL	3210 Minotaur-C XL
400 km @ 28.5°	1,458 kg (3,214 lb)	1,278 kg (2,814 lb)
400 km @ Sun-Synchronous	1,054 kg (2,324 lb)	912 kg (2,008 lb)
Typical Performance	3113 Minotaur-C XL	
C3 -10 (km ² /sec ²)	530 kg (1,170 lb)	
C3 0 (km ² /sec ²)	425 kg (940 lb)	

Flexible Payload Fairing Options

Two flight-proven fairings and two dual payload attach fittings are offered to provide cost-effective access to space for single and multiple payloads.

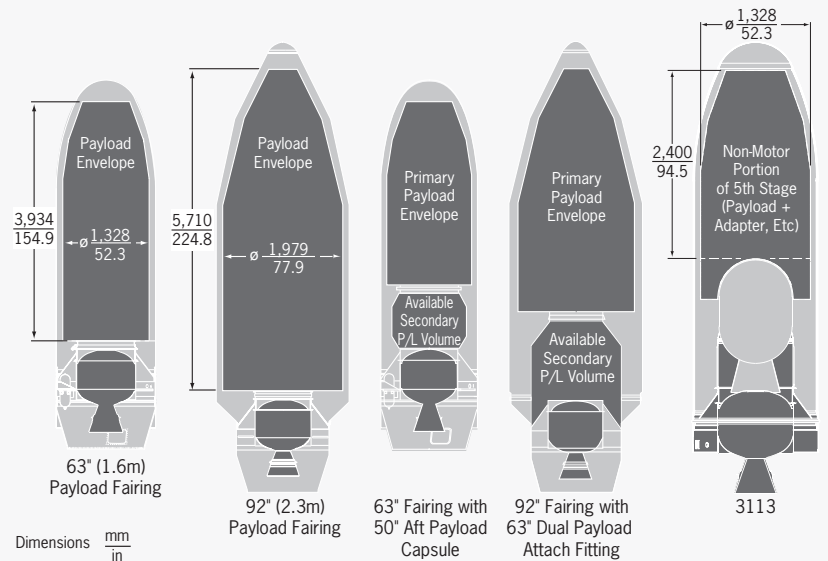
Standard Payload Accommodations

- Temperature, humidity control
- Class 8 (100,000) cleanliness

Enhanced Accommodations

- Class 7 (10,000) cleanliness
- Nitrogen purge

Flight-Proven Dual Payload Accommodations



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